

Mega-Blocks for Megaplexes

Commercial Block Saves Time, Money & Energy

By Andreas Fuchs

Anybody who has ever built a wall, a house or, of course, a movie theatre must have considered what it would be like if concrete and stone worked just like Lego blocks. After speaking with Mike Schwab, owner and president of Taylorsville, Utah-based Commercial Block Systems about his 14 theatrical construction projects with 120 screens completed since 1997, using his patented Insulated Concrete Forms (ICF) sounds just as easy. Better yet, these building blocks save time, money and energy. By incorporating recycled steel, they further qualify for bonus points in Green Building programs.

"We built an eight-plex in four months, from ground-breaking to grand opening," Schwab enthuses. "They were ready to begin construction on the Thanksgiving Stadium 8 in Lehi, Utah, with all plans drawn up and budgets done for CMU [concrete masonry unit]. After about two weeks of making changes to the specs, the switchover to Commercial Block allowed for a six-week saving on construction time. We also shaved off \$200,000 from the original estimated cost of the project. Our expert teams did all the perimeter walls, interior demising and corridor walls."

In another example from Southern Utah, Schwab finished a "theatre one month ahead of one of my competitors who was building about 15 miles away," despite the fact that the other venue had a head start of about two and a half months. "This stuff goes up so fast, it will make your head spin."

By using Commercial Block, he believes, "you can shorten construction time on your next project by as much as 20 percent. By finishing the job quicker, both time and money are saved by the owner and the builder." And Schwab has numbers to back it up. "By eliminating one month from the construction schedule, the interest on a commercial loan can be cut by as much as \$8,000 a month per one million dollars of loan amount, depending on how the loan is written. Shorter construction schedules not only help lower construction costs, but also help the owner to be open for business and start generating revenue sooner."

Following the 1997 ICF-premiere with the Cineplex Odeon 9 in Layton, Utah, Schwab currently has three theatres with 44 screens under construction. Ninety-two more are in design or permit stages; all the while he is "negotiating some 150-plus screens. We'll be in Central America soon and are already looking at projects in Mexico and Canada." One should also add that although "at least 70 percent of our work is

for movie theatres," Schwab uses his insulated concrete forms for other "large-scale commercial projects ranging from retail and communications buildings to hospitals, apartment complexes, you name it."

At 48" long, 12" or 16" tall by 13" wide [122 x 30/41 x 33 cm], it seems hard to believe that these Expanded Polystyrene framed units can be stacked up and filled to erect walls as high as 51 feet [15.5 m] without the use of intermediate floors. "Our largest ICF job to date is a building that is over 130,000 square feet [12,080 sq. m]," Schwab continues. "Commercial Block creates a solid, monolithic concrete wall that has a four-hour fire rating. Incorporated into our foam block is a 25-gauge metal stud—not plastic fasteners, as similar products from our competitors—located on eight-inch centers [20 cm]. This will keep the drywall on the wall longer in case of a fire. Our metal stud was designed with the help of a licensed structural engineering team with an open center into which we pump concrete. Set in eight-foot [2.5 m] sections at a time, they are internally vibrated to create a solid structure of reinforced concrete. Our block also has six built-in rebar chairs, three on the top and three on the bottom. Last but not least, there is a metal stud built into the block that holds my two walls together and doubles as fastener, to which you can screw sheet rock. You can attach brick, dryvit or put whatever you want on it."

"Unlike other forming systems, there is no need for stripping away the form," Schwab notes, pointing to another advantage, "as the foam stays in place as your insulation." He recalls a THX technician checking if the sound was indeed on next door, "because he couldn't pick up anything when he had set up his monitor in the adjacent auditorium. He



COMMERCIAL BLOCK
ENABLED CONSTRUCTION
OF A 16-SCREEN
STAR CINEMA IN IOWA
IN RECORD TIME.

said this was the first time after thousands of auditoria around the world." In addition to excellent sound properties, the ICF blocks

provide savings on HVAC of "up to 39 percent because of the high R-Values [of insulation] and thermal mass."

Bill Adamany, Jr. of AGT Enterprises, Inc. analyzed the heating costs for the Desert Star Cinema 10 in Lake Delton, which has since added five auditoria, and the Star Cinema 12 in Johnson Creek, both Wisconsin. "The results were very interesting," he relayed in a testimonial to Commercial Block. "Since the theatres use different utilities, I looked at therms instead of dollars. Johnson Creek used 5,938 therms [40,000 sq. ft. 3,720 sq. m] and Desert Star used 3,229 therms [54,000 sq. ft. 5,020 sq. m] for essentially the same time period. The heating systems are very similar. The numbers show that Desert Star used 46 percent less energy than did our other theatre. The use of your system instead of CMU is the primary difference in construction."

While it is always good to leave the last word to happy customers, Mike Schwab wants us to know "this stuff is here to stay."

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